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plants); window blinds (privacy or radiation monitor or lace pattern); clocks for telling time, and for advertising; educational electronic blackboards with automatic video, interactive; military-command/control centers; gaming/show biz centers; fiber optic devices (such as traffic control signs); electronic video games/arcades; theme parks with interactive videos; supermarket/POS; training vehicles; telephone conferencing equipment; combination equipment including fax, phone, video, copying and audio.

While illustrative embodiments of the invention have been described above, it is, of course, understood that various modifications will be apparent to those of ordinary skill in the art. Such modifications are within the spirit and scope of the invention, which is limited and defined only by the appended claims.

What is claimed is:

1. A programmable electronically actuated, continuous use traffic sign including a pixellated display matrix, the display matrix being electronically actuatable to display a desired traffic information image wherein the display matrix comprises:

- a) an array of pixels, each pixel having a shutter and each shutter comprising a movable element formed of solid material movable between a closed, light-blocking position extending across the pixel and an open, light-transmitting position wherein the shutter provides a first display surface having a first appearance to a viewer in the closed, extended position of the shutter;
- b) a second display surface behind each shutter with respect to the viewer and providing a second appearance to the viewer in the open, light-transmitting position of the shutter;

wherein the first appearance of each pixel contrasts visually with the second appearance of the pixel, wherein the desired image comprises a composition of open and closed shutters and wherein the display is programmable to change the shutter composition to display the desired traffic information image.

2. A traffic sign according to claim 1 wherein the first and second appearances are provided by first and second reflective surfaces, respectively, and wherein the traffic sign is viewable by reflected light.

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3. A traffic sign according to claim 2 wherein each shutter comprises an electrostatically actuated element movable between said open and closed positions.

4. A traffic sign according to claim 3 wherein each movable shutter element comprises a metallized flexible polymeric member prestressed into a coil.

5. A traffic sign according to claim 4 wherein the shutter elements are disposed on an extended, transparent, layered dielectric member with each shutter having a metallized surface engageable with one surface of the dielectric member and the display matrix comprises a transparent electrode layer engaged with an opposite surface of the dielectric member and wherein the second display surface comprises an extended reflective member whereby external light can be reflected from the reflective member to a viewer through an open shutter.

6. A traffic sign according to claim 1 comprising a network-connectable external communication device to enable remote programming of the traffic sign.

7. A traffic sign according to claim 1 comprising a solar panel to provide power for actuating the display matrix.

8. A traffic sign according to claim 7 comprising a battery chargeable from the solar panel to provide power when the solar panel does not.

9. A traffic sign according to claim 1 comprising illumination and an optical sensor to switch the display illumination according to ambient light levels.

10. A traffic sign according to claim 1 comprising a weatherproof, housing the display being optionally mounted on a pedestal.

11. A traffic sign according to claim 10 comprising, accommodated within the housing, drive circuitry, data processing functionality and a power supply.

12. A traffic sign according to claim 1 wherein the pixel-defining shutters are each from about 0.25 cm to about 2.5 cm in size.

13. A traffic sign according to claim 2 wherein adjacent shutters disposed in the closed light-blocking position are contiguously disposed, one with another, and present a continuous appearance.

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